

ABSTRACT**CHROMATIC DISPERSION COMPENSATION**

5 An optical dispersion compensation device includes a first optical compensation unit that applies non-linear dispersion compensation across a signal band, the first optical compensation unit being coupled to a second optical compensation unit that applies a degree of linear dispersion compensation across the signal band. The approach taken is to provide broadband dispersion compensation by applying dispersion slope
10 compensation across the signal band to equalise residual dispersion slope and by applying a degree of linear compensation separately to affect the required linear dispersion compensation. Using these two degrees of freedom it is possible to set the desired dispersion slope and linear dispersion (whether positive or negative) to affect broadband dispersion compensation without needing to demultiplex the optical signal.

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[Figure 1]